



The radar observer's problem in fractal rainfall fields: stochastic vs. deterministic modeling of a catchment's water balance

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The compatibility of departures between radar and gauge rainfall data with the intrinsic variability of a fractal model of rainfall is being analyzed in this work. Subsequently, the implications of such a model for the water balance of a catchment are evaluated, considering a remotely-sensed parameterization of a cascade model with random weights. An application of the developments is presented for the Rio Escondido basin area from the North of Mexico / South of the USA.